

Pender County Planning and Community Development

Planning Division

805 S. Walker Street
PO Box 1519
Burgaw, NC 28425



Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Oak Grove at Blake Farm Townhomes Major Site Development Plan

Case Number: SDP 2024-433

Application Type: Major Site Development Plan

Applicant: Trask Land Company, Inc.

Owners: Edisto Senior Real Estate, LLC

Location: West of the intersection of US Highway 17 and Reed Hammock Way, behind the Pinnacle Storage facility.

Property ID #(s): 3271-21-2972-0000

Project Area: 5 acres

Description: Development application for the construction of 24 townhome units, garages, and associated amenities.

Current Zoning: PD, Planned Development

Technical Review Committee Meeting: 10/3/2024

Board of County Commissioners/Planning Board Meeting: NA

Application Materials

Application
Site Plan

APPLICATION

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Major Site Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. X **Pre-submittal Meeting**
Date of Meeting 9/3/24
2. X **Signed Application**
3. X **Payment**
\$250
4. X **Paper Plan Sets**
Two (2) 24 x 36, Fifteen (15) 11 x 17
5. X **Digital Submission**
For all documents submitted in paper copy, bring a digital copy with paper submission.
6. X **Adjacent Property List**
A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the perimeter of the project bounds.
7. X **Adjacent Property Envelopes**
The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. X **Permits**
Include any permits issued on the project including but not limited to: environmental, traffic, utility, or site specific conditions.
9. X **Site Plan Requirements**
A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.3, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.
(See Major Site Development Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant

Colleen Rozier

Date

9/3/24

Printed Name

Colleen Rozier

Staff Initials: _____

Date: _____

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MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

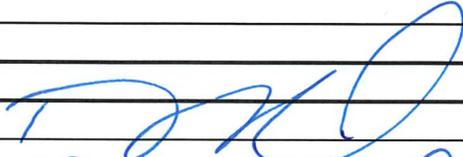
THIS SECTION FOR OFFICE USE			
Date:	Permit Number:	Permit Fee:	Invoice Number:
*Zoning Approval ONLY: YES / NO		Final Zoning Compliance Approved: YES / NO / N/A	
Type of Site Development Plan:	<input type="checkbox"/> Major	<input type="checkbox"/> Minor	
SECTION 1: GENERAL INFORMATION			
Applicant's Name:	Trask Land Company, Inc.	Property Owner's Name:	Edisto Senior Real Estate, LLC
Applicant's Address:	1022 Ashes Drive Suite 201	Property Owner's Address:	1022 Ashes Drive Suite 201
City, State, & Zip	Wilmington, NC 28405	City, State, & Zip	Wilmington, NC 28405
Phone Number:	910-799-8755	Phone Number:	910-799-8755
Email Address:	colleen@trasklandco.com	Email Address:	colleen@trasklandco.com
Legal relationship of applicant to land owner:	Applicant & property owner are the same		
SECTION 2: PROJECT INFORMATION			
PIN (Property Id #):	3271-21-2972-0000	Total property acreage:	5.84
Zoning :	PD	Acreage to be disturbed:	5.0 ac
Directions to Site:	Site is at the end of Reed Hammock Way		
Lot Size: +/- 5.84 ac	Sq Ft of Building: 26,376 sf	Building Height: 29 ft	
Setbacks	Front: 25 ft	Side: 10 ft	Rear: 15 ft
NAICS Code/Use:	236115		
Business Name:	Trask Land Company, Inc.		
Describe activities to be undertaken on project site:	Project will be townhomes that will be rental		
Ownership:	Number of Employees:	Number of Members:	Seating Capacity:
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Public			

**If the applicant is not the owner of the property, a notarized letter from the property owner may be required*

**Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e. Fire Marshal, Environmental Health, Permitting, etc...*

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SECTION 4: ADDITIONAL COMMENTS

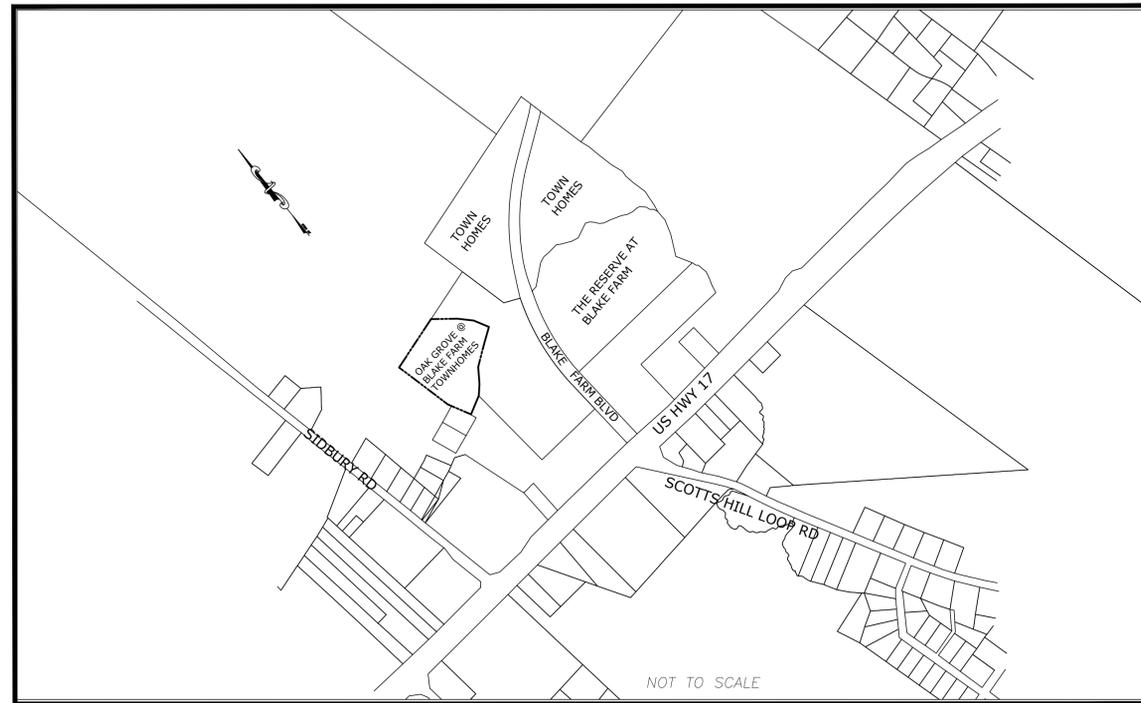
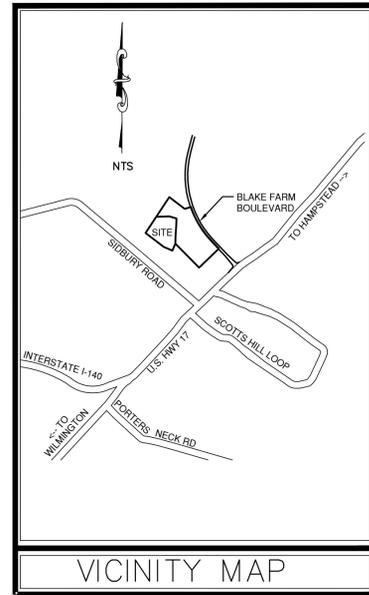
SECTION 5: SIGNATURES			
Applicant's Signature		Date:	9/3/24
Applicant's Name Printed	Raiford Trask III	Date:	9/3/24
Owner's Signature		Date:	9/3/24
Owner's Name Printed	Raiford Trask III	Date:	9/3/24
Planning Staff:		Date:	

SITE PLAN

Site Development For OAK GROVE @ BLAKE FARM TOWNHOMES

JUNE, 2024

PENDER COUNTY, NORTH CAROLINA



PRELIMINARY - DO NOT USE FOR CONSTRUCTION

OWNER

TRASK LAND COMPANY, INC.
1022 ASHES DRIVE, SUITE 201
WILMINGTON, NC 28405
TEL: 910-799-8755
raiford@trasklandco.com

**PORT CITY CONSULTING
ENGINEERS, PLLC**
6216 STONEBRIDGE ROAD
WILMINGTON, NC 28409
910-599-1744 LICENSE No. P-1032
mark@portcityeng.com

INDEX OF SHEETS	
SHT C-0	COVER SHEET
SHT C-1	GENERAL NOTES
SHT C-2	EXISTING CONDITIONS
SHT C-2.1	TREE REMOVAL PLAN
SHT C-3	SITE PLAN
SHT C-4	GRADING & DRAINAGE PLAN
SHT C-4.1	DRAINAGE AREA PLAN
SHT C-5	EROSION CONTROL PLAN
SHT C-5.1	EROSION CONTROL AREAS
SHT C-6	ROAD PLAN/PROFILE
SHT C-7.0	OVERALL UTILITY PLAN
SHT C-7.1	WATER & SEWER PLAN/PROFILE
SHT C-7.2	WATER PLAN/PROFILE
SHT C-8.0	POND DETAIL
SHT C-8.1-3	MISCELLANEOUS DETAILS
SHT C-9.0-2	SEWER DETAILS
SHT C-10.0-1	WATER DETAILS

SITE DATA TABLE	
GENERAL NOTES:	
1.	PENDER COUNTY PARCEL NO.: PIN# 3271-21-2972-0000
2.	TOTAL AREA: 5.84 AC.±
3.	EXISTING ZONING: PD
4.	PROPERTY OWNERS: EDISTO SENIOR REAL ESTATE, LLC 1022 ASHES DRIVE, SUITE 201 WILMINGTON, NC 28405 (910-799-8755)
DEVELOPMENT DATA:	
Total Tract Area = 5.84 ac +/-	
Totals Disturbed Area = 5.0 ac	
Number of Residential Units: 24	
Parking at 2/unit: 48 spaces	
Spaces Provided: 48 provided	
Handicap Spaces Provided: 1 space - 1 required	
Townhome Building Height - 29'	
Total Floor Area - 24,000 sf	
Car Garage Height - 23' - 1"	
Total Floor Area - 2,376 sf	
ITE Trip Generation:	
ITE Code 251 - Senior Adult Housing	
24 Hour Volume - 176	
AM Peak Hour - Exit - 9	
Enter - 4	
PM Peak Hour - Exit - 6	
Enter - 9	
Setbacks:	
Front Yard - 25 ft	
Side Yard - 10 ft	
Rear Yard - 15 ft	
BuildingType: Main Building - VA	
Garages - VB	
POWER: DUKE ENERGY - JON MARSTON (910) 602-4346	
AT&T (BELLSOUTH): JAMES BATSON 910-452-5300	
SPECTRUM: ROBERT JOHN 910-216-4494	
PENDER COUNTY PUBLIC UTILITIES: Anthony Colon (910) 259-0212	
PLURIS: (910) 327-2880	
NOTE: ALL DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH PENDER COUNTY, PLURIS & THE STATE OF NORTH CAROLINA	

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
PROPERTY BOUNDARY	---	---
EASEMENT	---	---
STREAM	---	---
STRUCTURE	---	---
MINOR CONTOURS	---8---	---8---
MAJOR CONTOURS	---10---	---10---
GAS LINE	---G---G---	---G---G---
OVERHEAD POWER	---OHP---OHP---	---OHP---OHP---
WATER LINE	---W---W---	---W---W---
SANITARY SEWER LINE	---SS---SS---	---SS---SS---
SANITARY SEWER MANHOLE	(S)	(S)
STORM DRAINAGE PIPE	---	---
STORM DRAINAGE STRUCTURE	○ □	● ■
TREE	1 1" OAK ●	● ✪ ●
CONCRETE	[Pattern]	[Pattern]
SILT FENCE	---	---SF---SF---
TREE PROTECTION FENCE	---	---TP---TP---
FIRE HYDRANT ASSEMBLY	---H---	---H---
DISTURBED LIMITS LINE	---	---DL---DL---
PERVIOUS PAVEMENT	[Pattern]	[Pattern]

COORDINATION NOTES

- THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
- ALL WORK IS TO BE IN ACCORDANCE WITH PENDER COUNTY AND THE STATE OF NORTH CAROLINA.
- THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
- ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.

GENERAL NOTES:

- EXISTING TOPOGRAPHY, BOUNDARY AND UTILITIES, HAVE BEEN PREPARED BY FIELD SURVEY BY MICHAEL UNDERWOOD AND ASSOCIATES, PA.
- REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY REVENUES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
- CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE DOT.
- ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
- ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
- CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
- CONTRACTOR SHALL REMOVE ASPHALT, AGGREGATE BASE COURSE, AND CONCRETE CURB & GUTTER WITHIN LIMITS OF DEMOLITION AS SHOWN ON PLAN.

DEMOLITION NOTES

- CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
- CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
- DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES; ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.
- ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
- EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION
- ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.
- CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVER HEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
- PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
- ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES:

- CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
- PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON THIS SHEET OF CEASE OF ANY GRADING ACTIVITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES
- DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY NEW HANOVER COUNTY.
- WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SODDED AND PLANTED AREAS UNTIL FINAL APPROVAL BY NEW HANOVER COUNTY.
- ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
- ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

MAINTENANCE PLAN

- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
 - ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
 - SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. SILT FENCE STAKES WILL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8 FOOT STAKE SPACING.
 - INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.
 - INSPECT INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.
 - INSPECT SILT SACKS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE SILT SACK OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE THE SILT SACK DURING SEDIMENT REMOVAL. REPLACE AS NEEDED.
 - INSPECT SKIMMER SEDIMENT BASINS AS LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER. REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.
- IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY KICKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLodge THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.
- IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER. CHECK FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND THERE DEBRIS FROM THE SKIMMER AND POOL AREAS. FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.
- ALL SEEDED AREAS WILL BE FERTILIZED, RESEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS.

PERMANENT SEEDING SCHEDULE

SPECIES	RATE (LB/ACRE)
CAROLINA COASTAL SEED MIX (BLEND)	200
20.35% GULF ANNUAL RYEGRASS	
30.30% BROWNTOP MILLET	
29.75% FAWN TALL FESCUE	
9.65% CREEPING RED FESCUE	
7.4% UNHULLED BERMUDDAGRASS	
0.55% CENTIPEDEGRASS	

Seeding Dates

MARCH - JUNE

Soil Amendments

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

CHECK WITH OWNER PRIOR TO APPLYING. ALL CHEMICALS MUST BE PREAPPROVED BY GE.

Mulch

DO NOT MULCH.

Maintenance By Owner

FERTILIZE VERY SPARINGLY LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTIPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING

Seeding Mixture WINTER AND EARLY SPRING

SPECIES	RATE (LB/ACRE)
Rye (GRAIN)	
ANNUAL LESPEDEZA (KOBÉ IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	
OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.	

SUMMER

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	120
	50

FALL

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	40

Seeding dates

COASTAL PLAIN - DEC.1-APR. 15 - LATE WINTER AND EARLY SPRING
 APRIL 15 - AUG. 15 - SUMMER
 AUG. 15 - DEC. 30 - FALL

Soil amendments

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

Mulch

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

Maintenance

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

GENERAL GRADING NOTES

- REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF SUCH UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF THE DITCHING OPERATION BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF THE TRENCHING OPERATIONS SO AS TO AVOID AND PREVENT DAMAGE TO THE EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO REPAIRS AND LOSS SERVICE REVENUE. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
- CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAG MEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE MCDOT.
- ALL MATERIAL CLEARED AND GRUBBED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK, SUCH AS TREES, VEGETATION, FENCING, ETC... SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE OR BURNED IF PROPER PERMITS ARE RECEIVED.

SITE NOTES

- ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
- CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
- DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
- THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
- CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENT SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER.
- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE OTHER OBSTRUCTIONS OR FROM DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT NORTH CAROLINA ONE CALL TOLL FREE 1-800-632-4949 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES.
- ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY, AND LOCAL CODES.
- FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
- ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
- THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

GENERAL STORM SEWER NOTES

- ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PENDER COUNTY AND THE STATE OF NORTH CAROLINA REQUIREMENTS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
- BEDDING FOR ALL STORM SEWER PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND MANUFACTURER SPECIFICATIONS.
- ALL STORM SEWER PIPES TO BE HDPE ADS N-12 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED.
- ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.

GENERAL FIRE MARSHALL NOTES:

- BUILDING WILL REQUIRE SPRINKLER AND FIRE ALARM PURSUANT TO NCSFC, NFPA 13 & 72.
- FIRE EXTINGUISHERS IN COMMON AREAS PURSUANT TO NCSFC CHAP. 9.
- PURSUANT TO 905.3.1, THE BUILDING IS ABOVE 30 FT AND WILL REQUIRE A STANDPIPE SYSTEM. POOL/CLUBHOUSE WILL BE REQUIRED TO HAVE SPRINKLER, ALARM AND EMERGENCY CALL BOX
- BUILDING WILL REQUIRE A BDA DUE TO SIZE, CONSTRUCTION MATERIALS AND MULTIPLE FLOOR LEVELS PURSUANT TO NCSFC SECTION 510.
- A HYDRANT WILL BE NEED TO BE WITHIN 100 FT OF THE FDC FOR THE STANDPIPE SYSTEM AND THE STANDPIPE WILL NEED TO BE ACCESSIBLE ON ALL FOUR FLOORS PLUS THE INNER COURTYARD.
- A KNOX BOX WILL NEED TO BE PROVIDED FOR KEY ACCESS TO ALL COMMON AREAS.

EXISTING UTILITY NOTES

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

UTILITY CONTACTS:

- CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING AND DIGGING. 1-800-632-4949

DUKE ENGERY: JOHN ELLIOT - john.elliott@pncmail.com

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST THREE WORKING DAYS, BUT NOT MORE THAN TWELVE WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT 1-800-632-4949 or 811

EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

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OAK GROVE @ BLAKE FARM TOWNHOMES
 PENDER COUNTY NORTH CAROLINA

TRASK LAND COMPANY, INC.
 1022 ASHES DRIVE, SUITE 201
 WILMINGTON, NC 28405

PORT CITY CONSULTING ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
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GENERAL NOTES

Sheet No.
C-1

NOW OR FORMERLY
 BANYON SILO RIDGE HOMEOWNERS ASSOCIATION
 DEED BOOK 4800 PAGE 139
 PD ZONING

NOW OR FORMERLY
 CCC TOWNES AT BLAKE FARM LLC
 DEED BOOK 4775 PAGE 1547-1548
 PD ZONING

NOW OR FORMERLY
 CCC TOWNES AT BLAKE FARM LL
 BOOK 4735 PAGE 1822
 PD ZONING

NOW OR FORMERLY
 SILO RIDGE SFR, LLC
 DEED BOOK 4792 PAGE 1236
 PD ZONING

NOW OR FORMERLY
 BRAITHE CENTER, LLC
 DEED BOOK 4678 PAGE 1030
 PD ZONING

NOW OR FORMERLY
 BLAKE FARM STORAGE, LLC
 DEED BOOK 4737 PAGE 2716
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ABBREVIATION	COMMON NAME	SCIENTIFIC NAME
MH	MOCKERNUT HICKORY	CARYA TOMENTOSA
MAG	MAGNOLIA	MAGNOLIA GRANDIFLORA
G	SWEET GUM	LIQUIDAMBAR STRYACIFLUA
O	OAK	QUERCUS NIGRA

GRAPHIC SCALE

1" = 40' 0"

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EXISTING CONDITIONS

Sheet No.
C-2

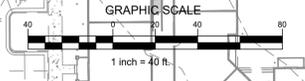
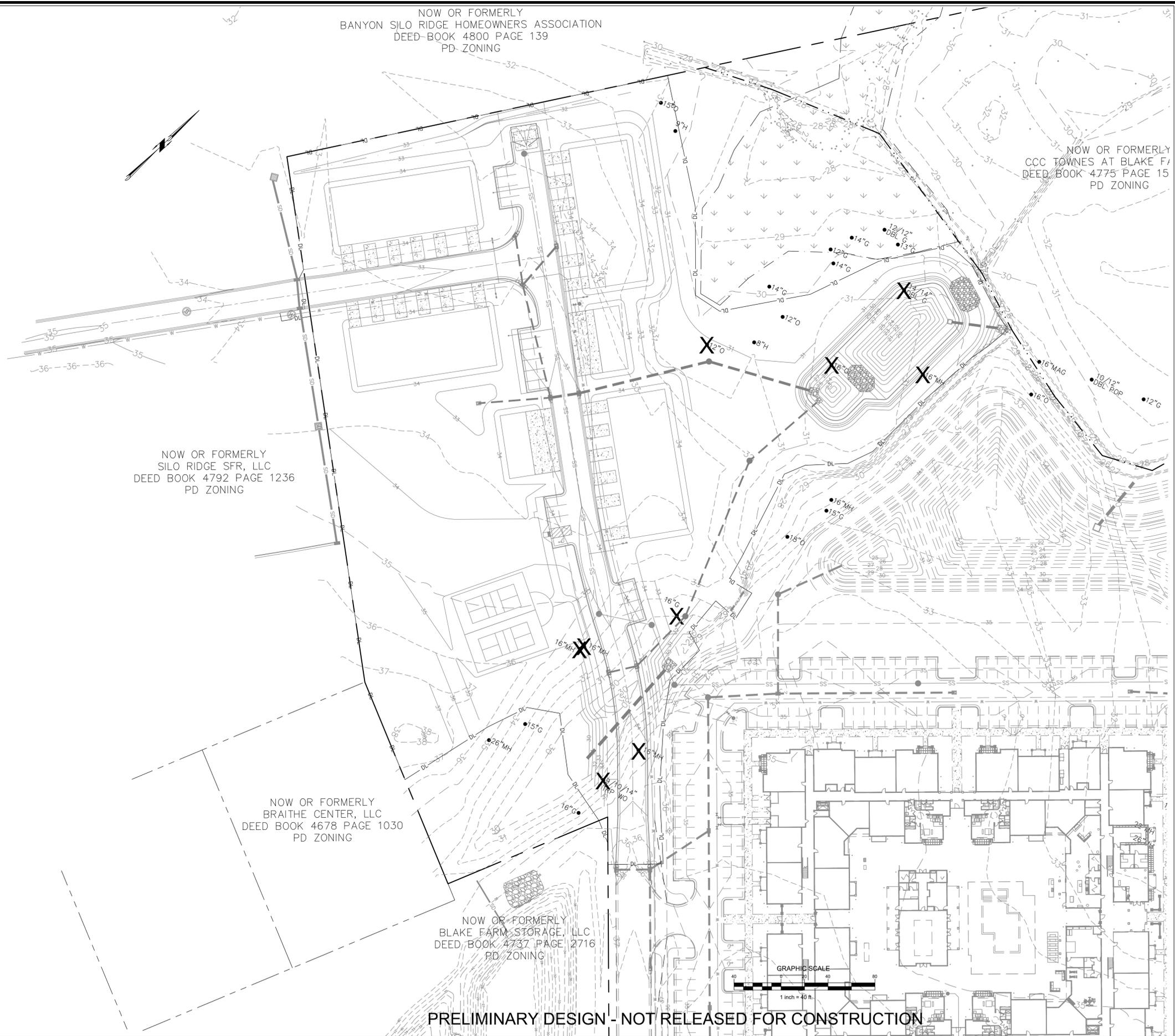
NOW OR FORMERLY
 BANYON SILO RIDGE HOMEOWNERS ASSOCIATION
 DEED-BOOK 4800 PAGE 139
 PD ZONING

NOW OR FORMERLY
 CCC TOWNES AT BLAKE F/
 DEED BOOK 4775 PAGE 15
 PD ZONING

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 SILO RIDGE SFR, LLC
 DEED BOOK 4792 PAGE 1236
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TREE REMOVAL PLAN

Sheet No.
C-2.1

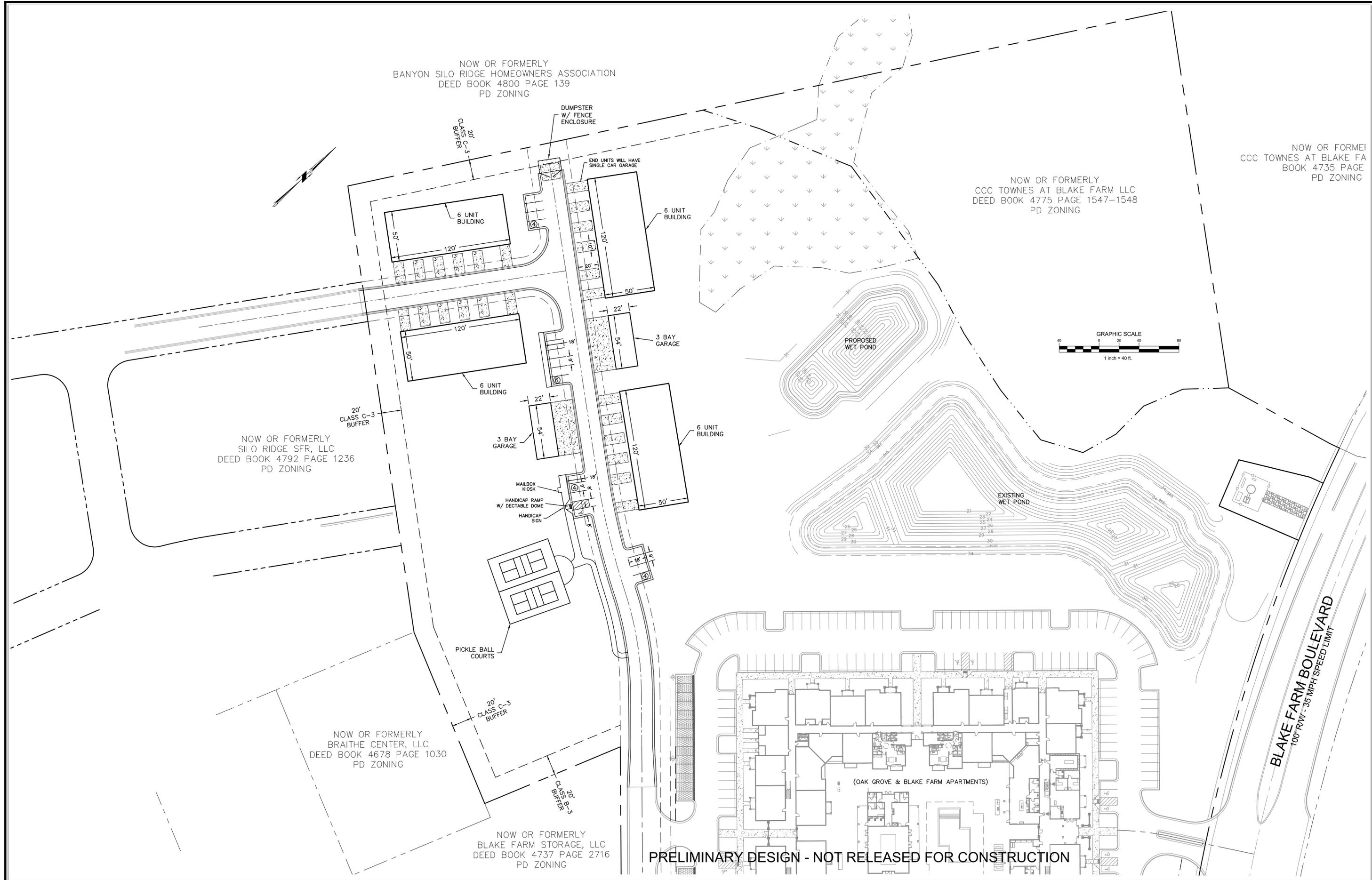
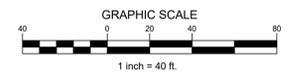
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BANYON SILO RIDGE HOMEOWNERS ASSOCIATION
DEED BOOK 4800 PAGE 139
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DEED BOOK 4775 PAGE 1547-1548
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SITE LAYOUT PLAN

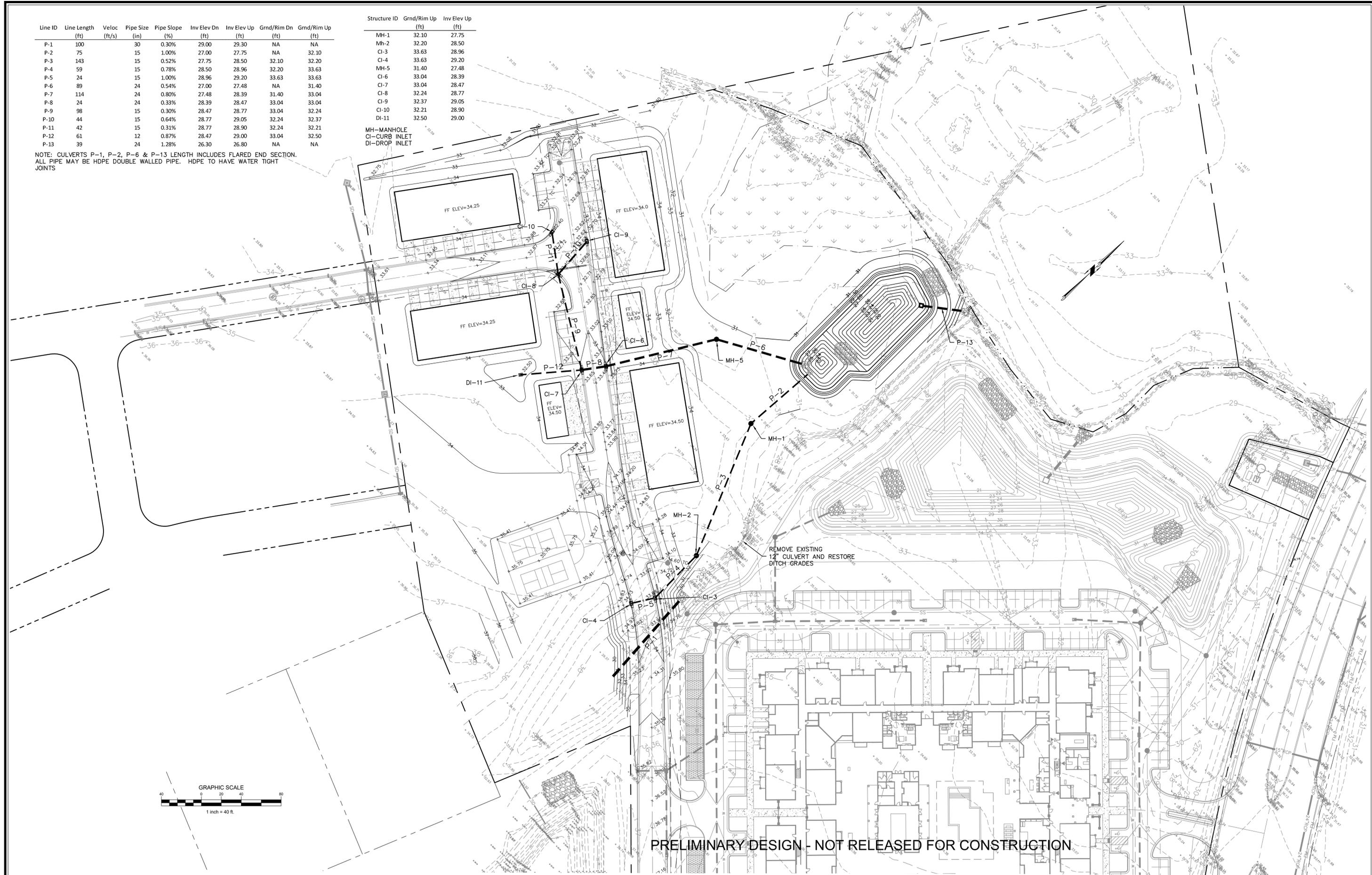
Sheet No.
C-3

Line ID	Line Length (ft)	Veloc (ft/s)	Pipe Size (in)	Pipe Slope (%)	Inv Elev Dn (ft)	Inv Elev Up (ft)	Grnd/Rim Dn (ft)	Grnd/Rim Up (ft)
P-1	100		30	0.30%	29.00	29.30	NA	NA
P-2	75		15	1.00%	27.00	27.75	NA	32.10
P-3	143		15	0.52%	27.75	28.50	32.10	32.20
P-4	59		15	0.78%	28.50	28.96	32.20	33.63
P-5	24		15	1.00%	28.96	29.20	33.63	33.63
P-6	89		24	0.54%	27.00	27.48	NA	31.40
P-7	114		24	0.80%	27.48	28.39	31.40	33.04
P-8	24		24	0.33%	28.39	28.47	33.04	33.04
P-9	98		15	0.30%	28.47	28.77	33.04	32.24
P-10	44		15	0.64%	28.77	29.05	32.24	32.37
P-11	42		15	0.31%	28.77	28.90	32.24	32.21
P-12	61		12	0.87%	28.47	29.00	33.04	32.50
P-13	39		24	1.28%	26.30	26.80	NA	NA

Structure ID	Grnd/Rim Up (ft)	Inv Elev Up (ft)
MH-1	32.10	27.75
Mh-2	32.20	28.50
CI-3	33.63	28.96
CI-4	33.63	29.20
MH-5	31.40	27.48
CI-6	33.04	28.39
CI-7	33.04	28.47
CI-8	32.24	28.77
CI-9	32.37	29.05
CI-10	32.21	28.90
DI-11	32.50	29.00

MH-MANHOLE
CI-CURB INLET
DI-DROP INLET

NOTE: CULVERTS P-1, P-2, P-6 & P-13 LENGTH INCLUDES FLARED END SECTION.
ALL PIPE MAY BE HDPE DOUBLE WALLED PIPE. HDPE TO HAVE WATER TIGHT JOINTS



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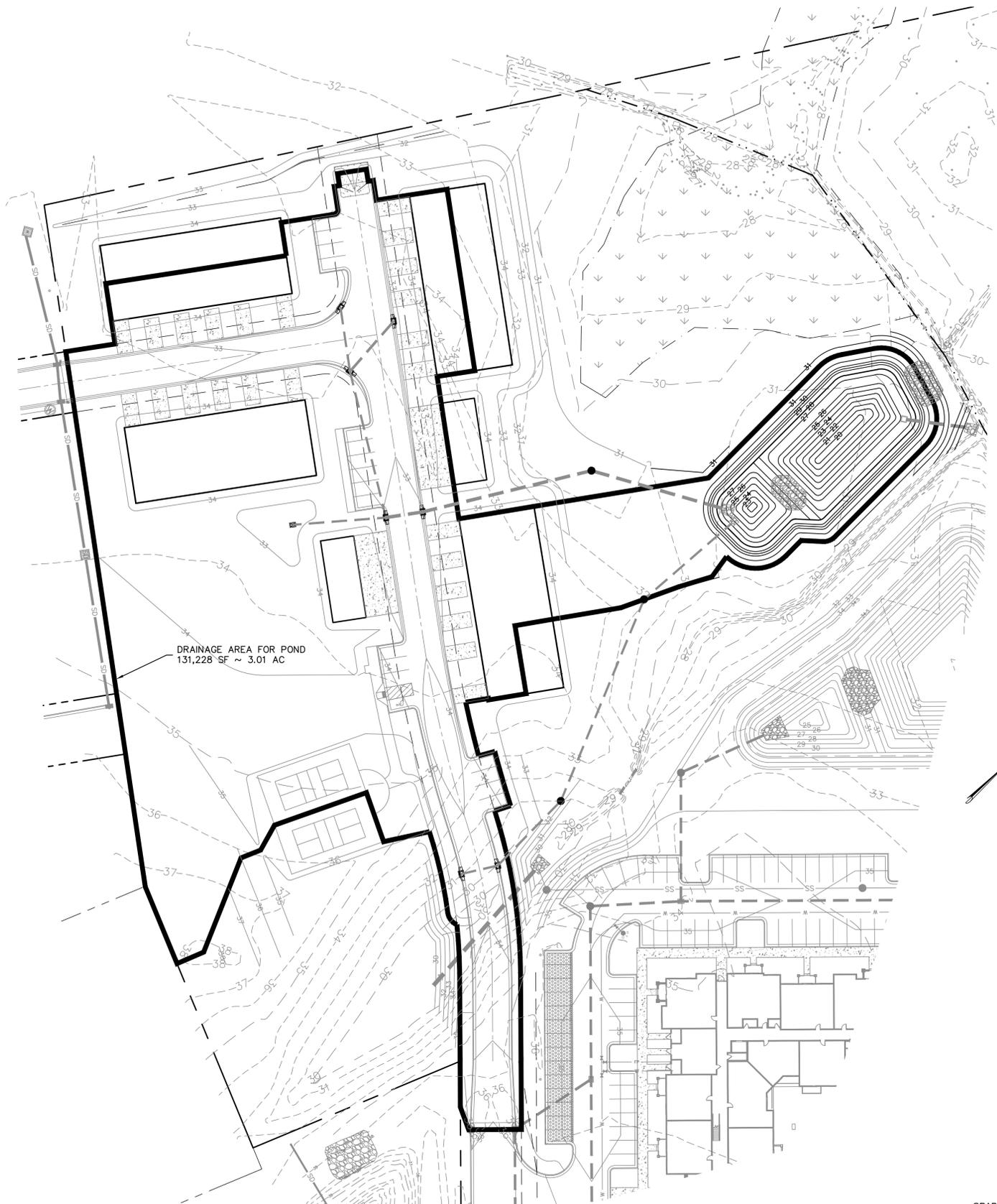
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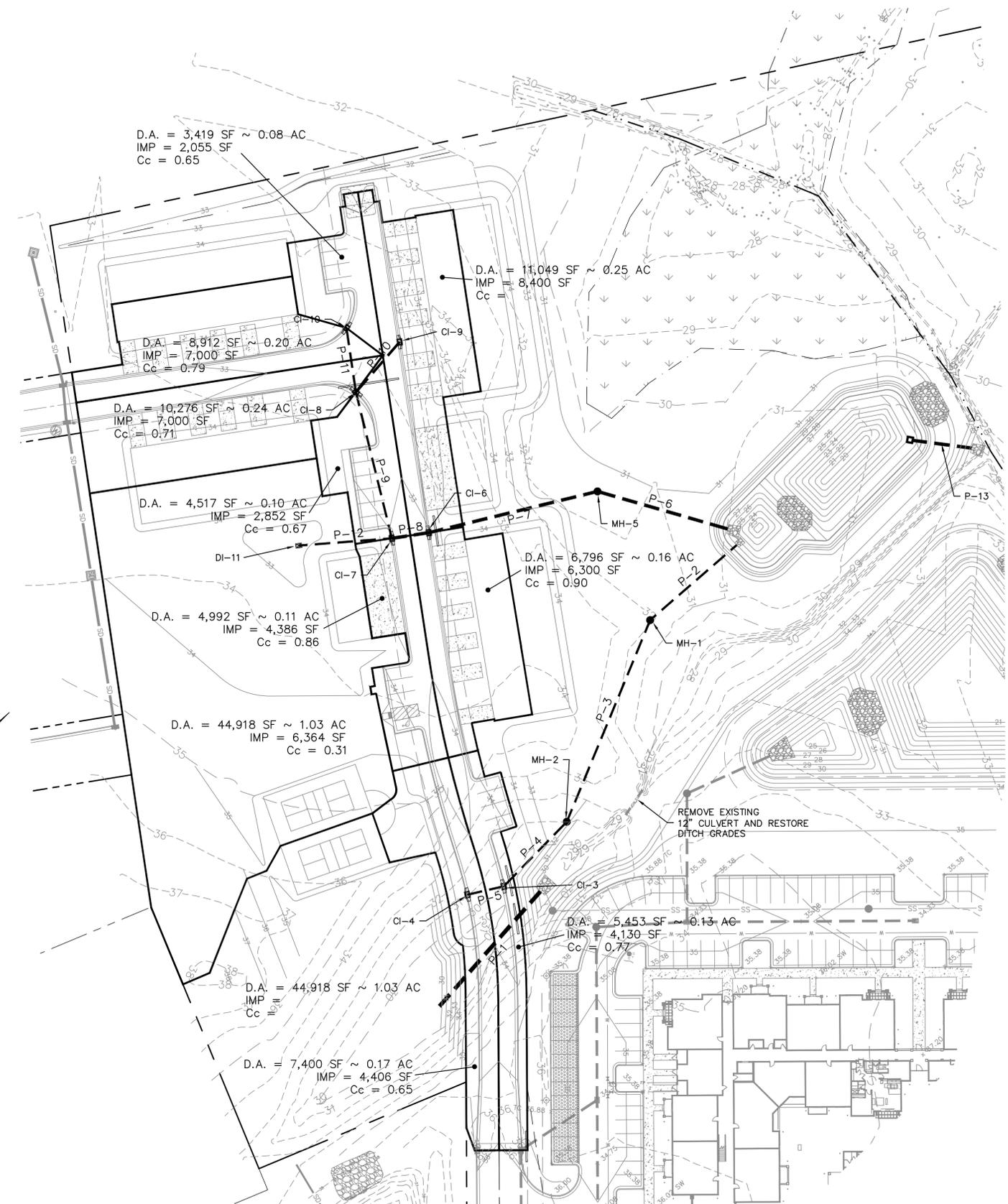
GRADING & DRAINAGE PLAN

Sheet No. **C-4**



DRAINAGE AREA FOR POND
131,228 SF ~ 3.01 AC

POND DRAINAGE AREA



D.A. = 3,419 SF ~ 0.08 AC
IMP = 2,055 SF
Cc = 0.65

D.A. = 11,049 SF ~ 0.25 AC
IMP = 8,400 SF
Cc = 0.79

D.A. = 8,912 SF ~ 0.20 AC
IMP = 7,000 SF
Cc = 0.79

D.A. = 10,276 SF ~ 0.24 AC
IMP = 7,000 SF
Cc = 0.71

D.A. = 4,517 SF ~ 0.10 AC
IMP = 2,852 SF
Cc = 0.67

D.A. = 4,992 SF ~ 0.11 AC
IMP = 4,386 SF
Cc = 0.86

D.A. = 44,918 SF ~ 1.03 AC
IMP = 6,364 SF
Cc = 0.31

D.A. = 6,796 SF ~ 0.16 AC
IMP = 6,300 SF
Cc = 0.90

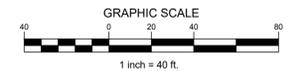
D.A. = 5,453 SF ~ 0.13 AC
IMP = 4,130 SF
Cc = 0.77

D.A. = 44,918 SF ~ 1.03 AC
IMP = 6,364 SF
Cc = 0.31

D.A. = 7,400 SF ~ 0.17 AC
IMP = 4,406 SF
Cc = 0.65

REMOVE EXISTING
12" CULVERT AND RESTORE
DITCH GRADES

INLET DRAINAGE AREA



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1	REVISED LOT DRAINAGE	7/11/22	MNH

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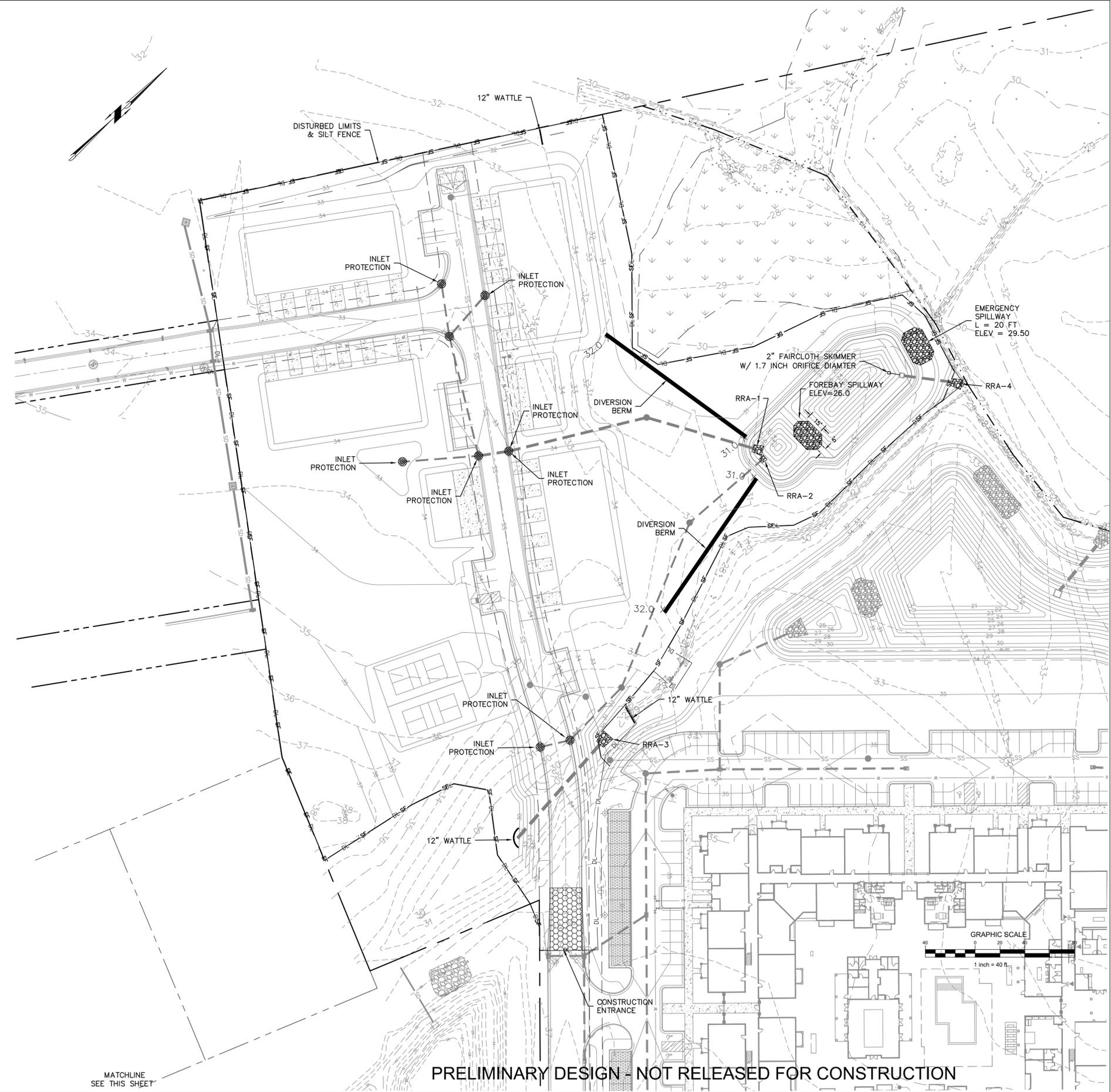
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DRAINAGE AREA PLAN

Sheet No.
C-4.1

EROSION AND SEDIMENT CONTROL SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE AND PERIMETER SILT FENCE AS SHOWN ON THE PLANS. CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
2. INSTALL THE WET POND THAT WILL ALSO ACT AS A SEDIMENT BASIN. CLEAR ONLY AS NECESSARY TO INSTALL THE WET POND.
3. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
4. INSTALL DIVERSION BERMS TO DIRECT ANY RUNOFF TO THE WET POND. SITE RUNOFF SHALL BE DIRECTED TO THE WET POND/SEDIMENT BASIN.
5. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN GRADING ACTIVITY HAS STOPPED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES.
7. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY THE NC LAND QUALITY SECTION.
8. WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SODDED AND PLANTED AREAS UNTIL FINAL APPROVAL BY THE NC LAND QUALITY SECTION.
9. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
10. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.



MATCHLINE
SEE THIS SHEET

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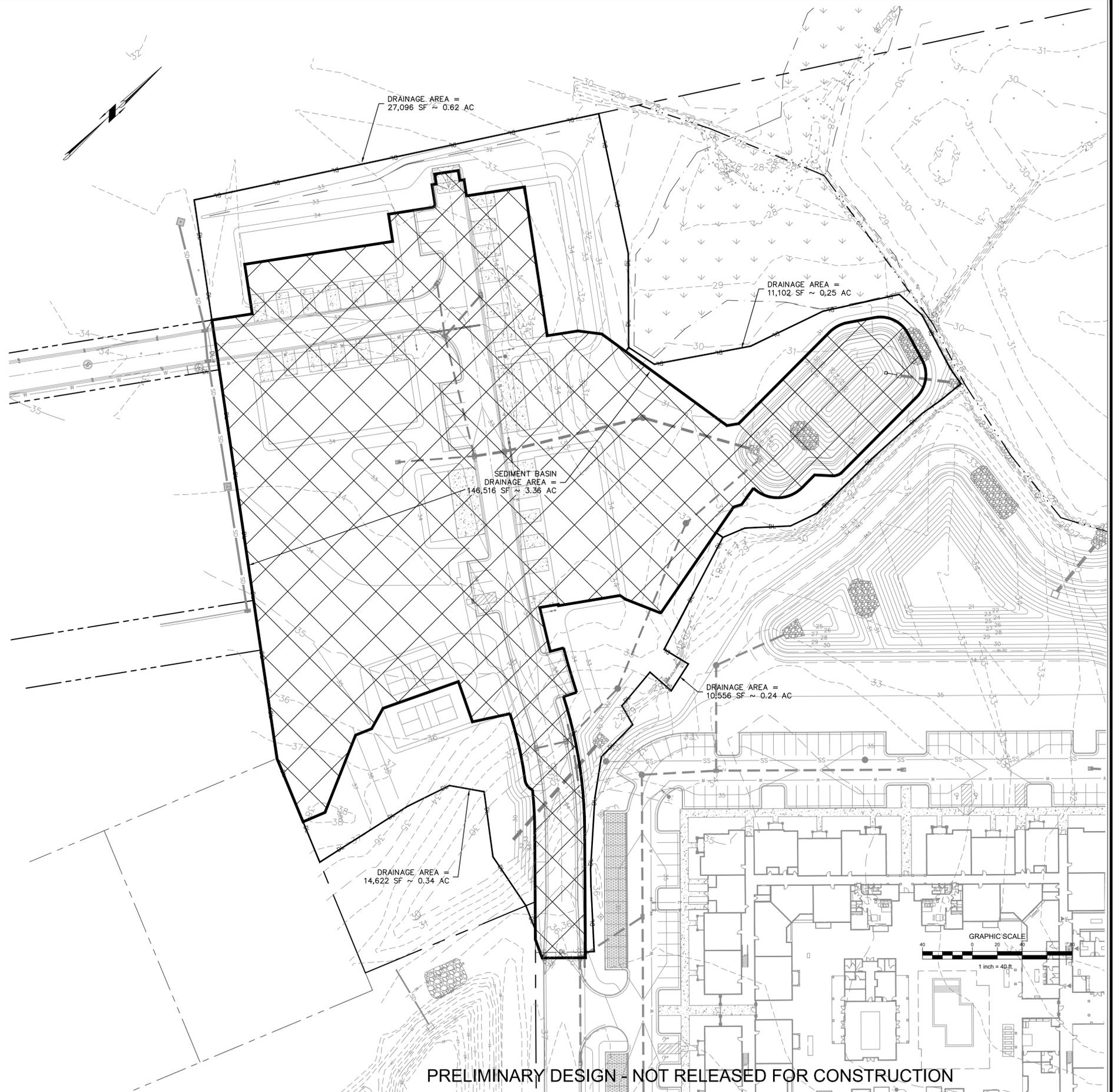
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EROSION CONTROL PLAN

Sheet No.
C-5

EROSION AND SEDIMENT CONTROL SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE AND PERIMETER SILT FENCE AS SHOWN ON THE PLANS. CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
2. INSTALL THE WET POND THAT WILL ALSO ACT AS A SEDIMENT BASIN. CLEAR ONLY AS NECESSARY TO INSTALL THE WET POND.
3. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
4. INSTALL DIVERSION BERMS TO DIRECT ANY RUNOFF TO THE WET POND UNTIL STORM CULVERTS AND CURB/DROP INLETS ARE INSTALLED. SITE RUNOFF SHALL BE DIRECTED TO THE WET POND/SEDIMENT BASIN.
5. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON C-1 OF CEASE OF ANY GRADING ACTIVITY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES.
7. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY THE NC LAND QUALITY SECTION.
8. WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SODDED AND PLANTED AREAS UNTIL FINAL APPROVAL BY THE NC LAND QUALITY SECTION.
9. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
10. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.



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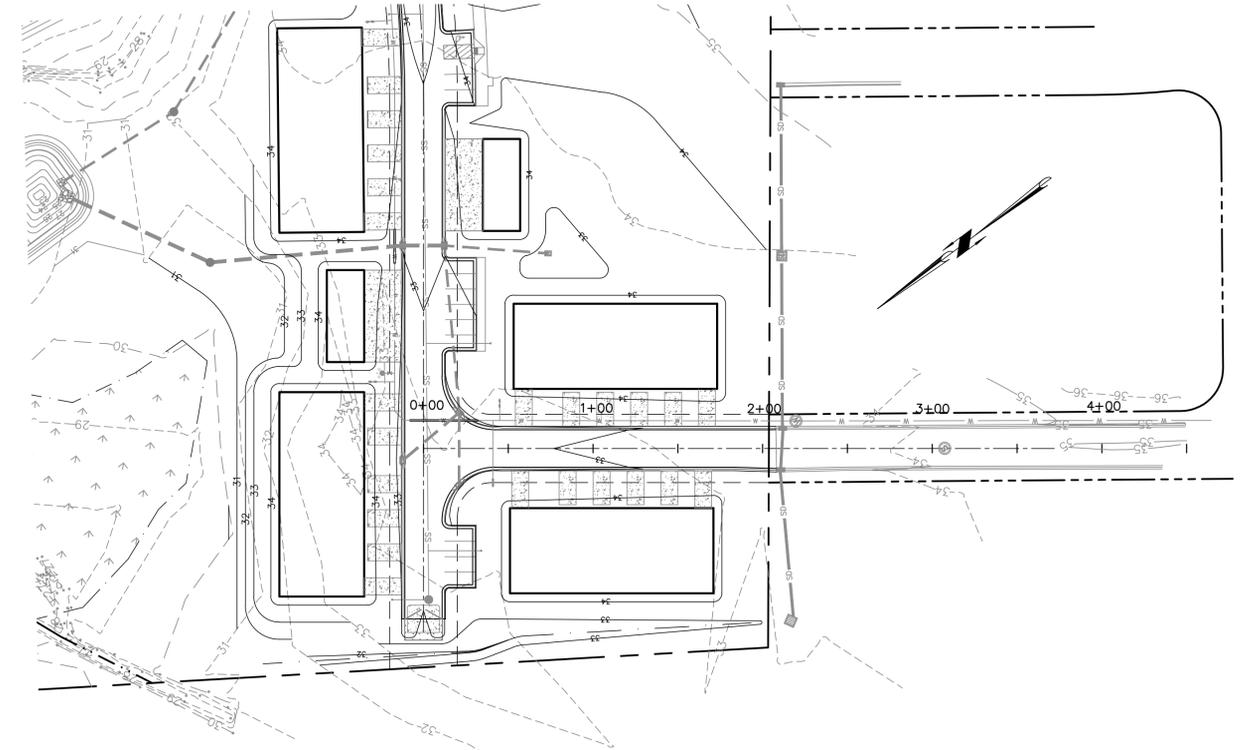
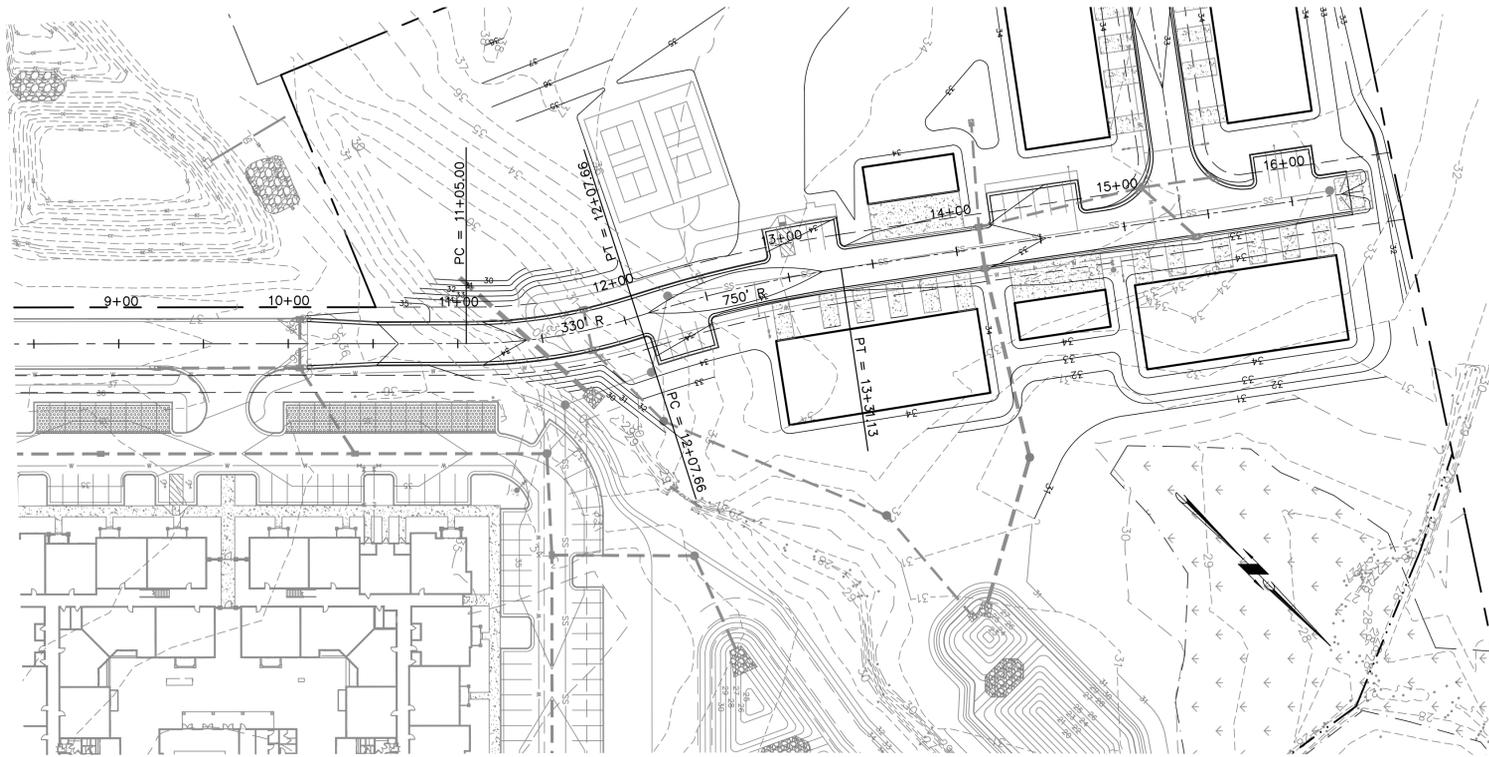
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EROSION CONTROL AREAS

Sheet No.
C-5.1

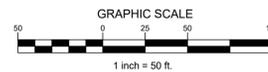
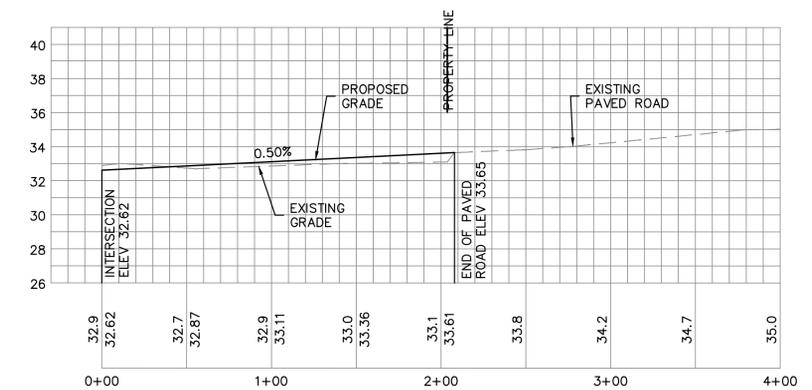
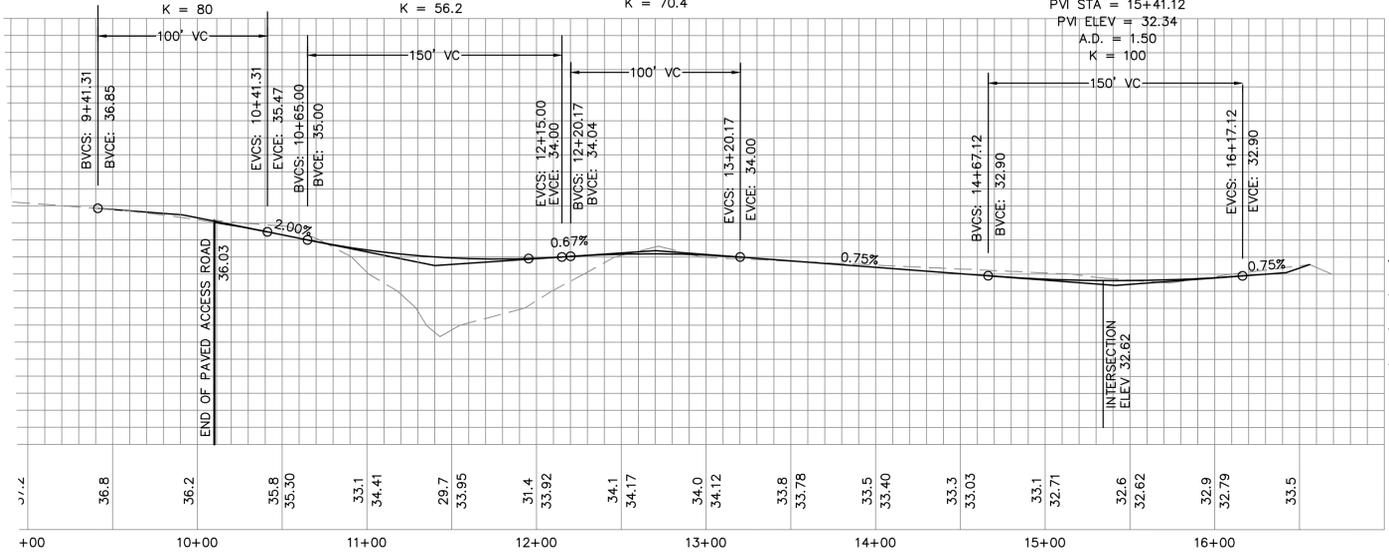


ELEV ON CURVE AT PVI = 36.31
 PVI STA = 9+91.31
 PVI ELEV = 36.47
 A.D. = -1.25
 K = 80

LOW POINT ELEV = 33.88
 LOW POINT STA = 11+77.36
 PVI STA = 11+40.00
 PVI ELEV = 33.50
 A.D. = 2.67
 K = 56.2

HIGH POINT ELEV = 34.19
 HIGH POINT STA = 12+67.35
 PVI STA = 12+70.17
 PVI ELEV = 34.37
 A.D. = -1.42
 K = 70.4

LOW POINT ELEV = 32.62
 LOW POINT STA = 15+41.12
 PVI STA = 15+41.12
 PVI ELEV = 32.34
 A.D. = 1.50
 K = 100



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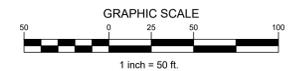
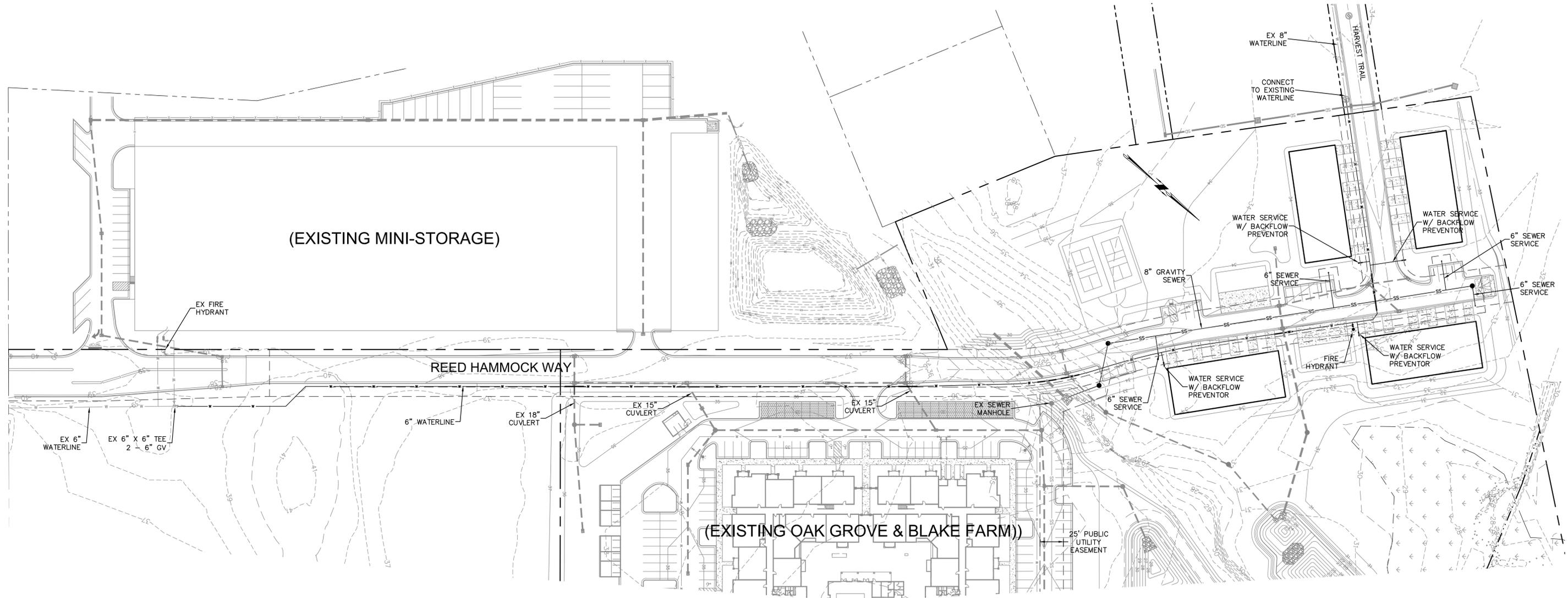
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ROAD PLAN/PROFILE

Sheet No.
C-6



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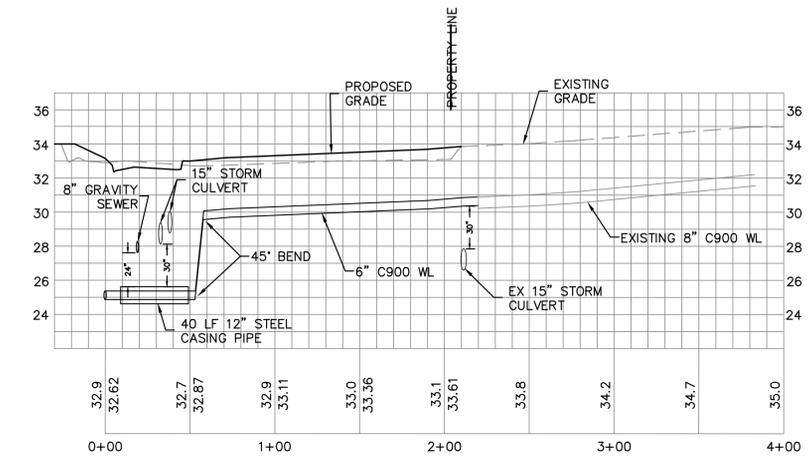
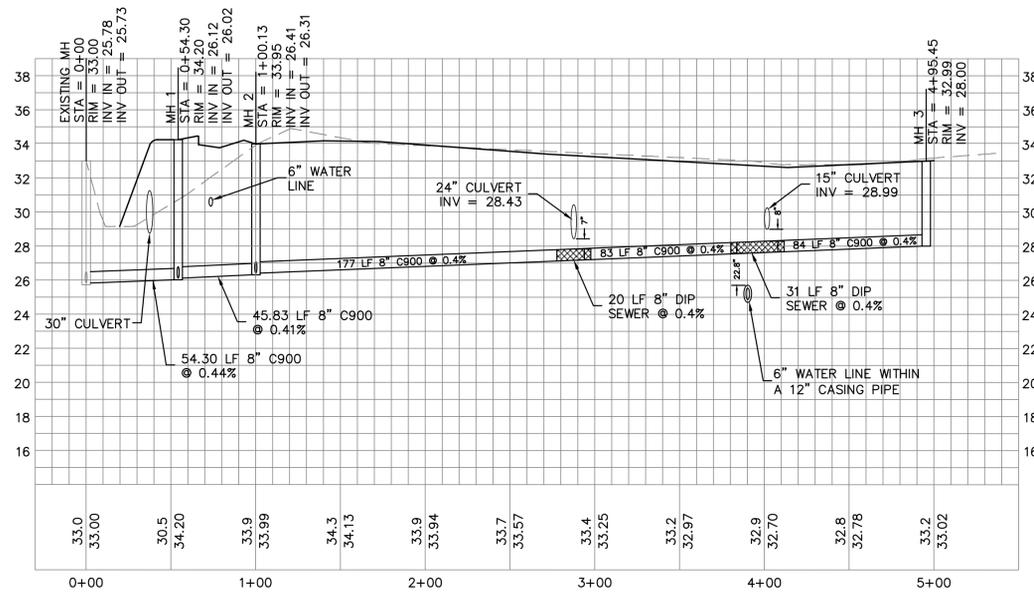
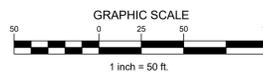
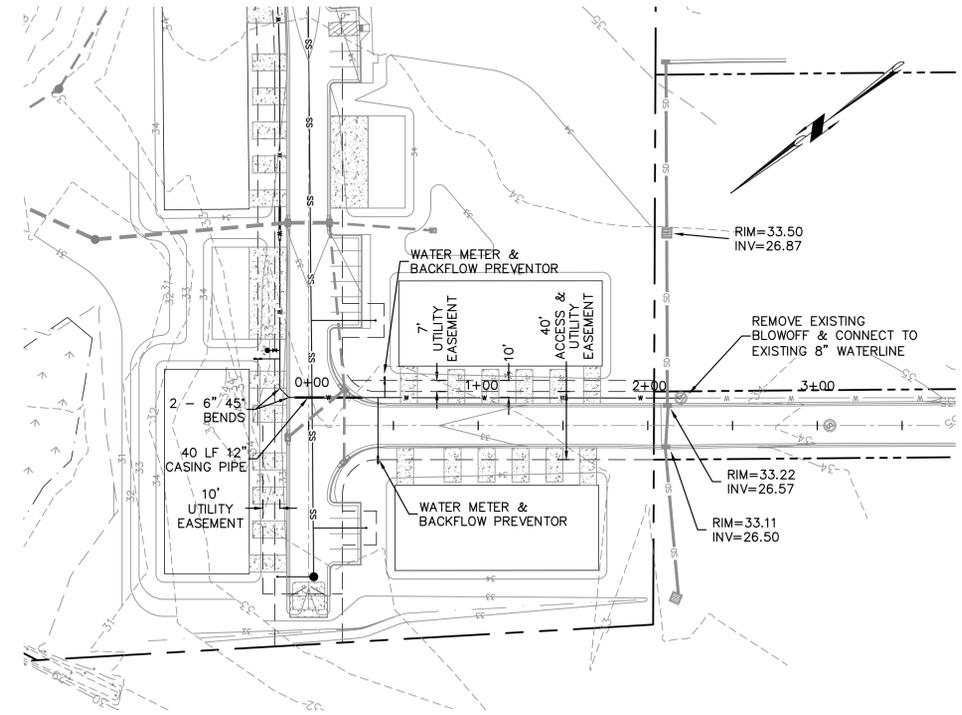
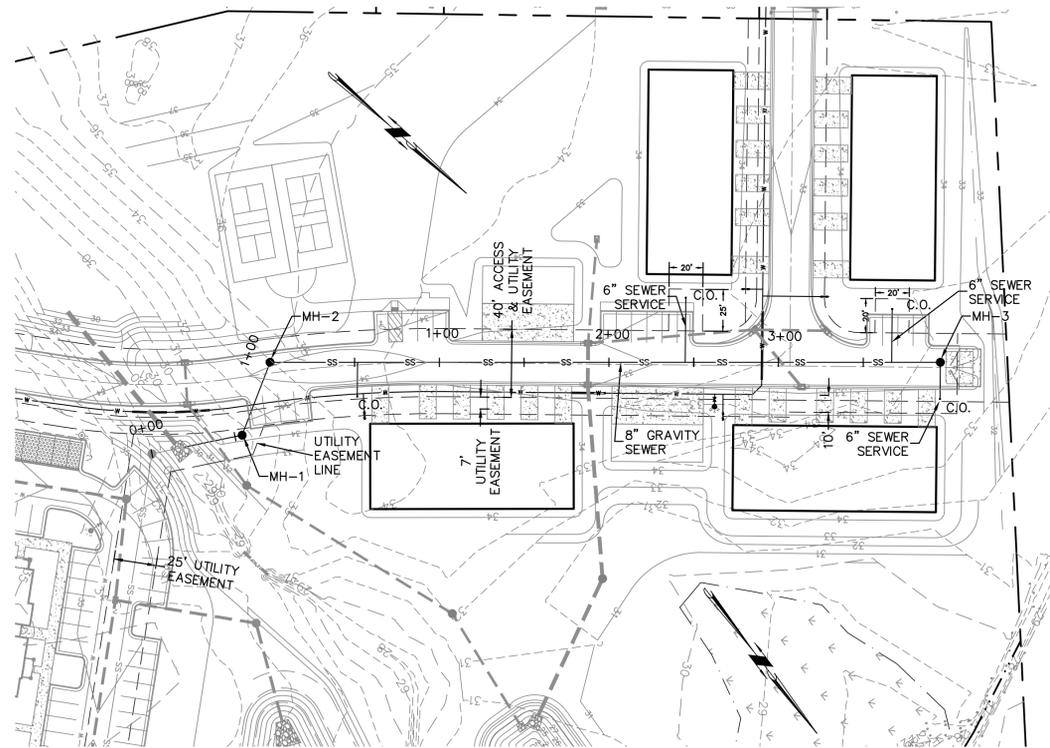
OAK GROVE @ BLAKE FARM TOWNHOMES
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OVERALL UTILITY PLAN

Sheet No.
C-7



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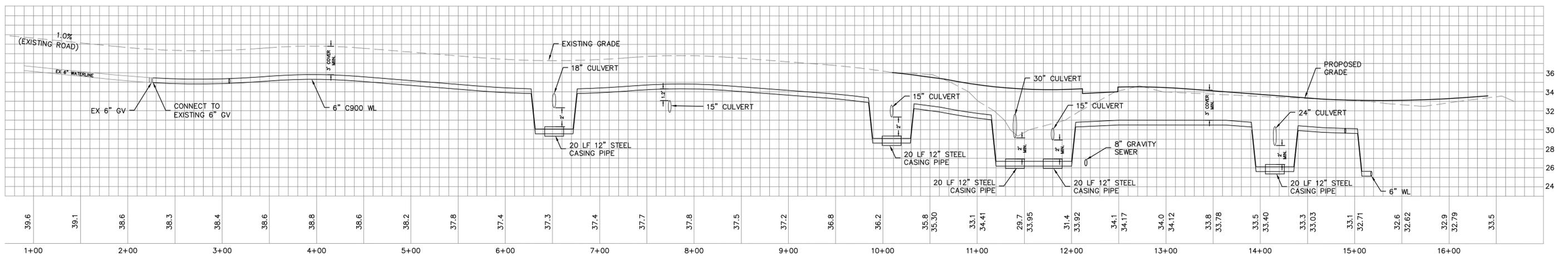
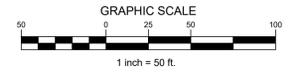
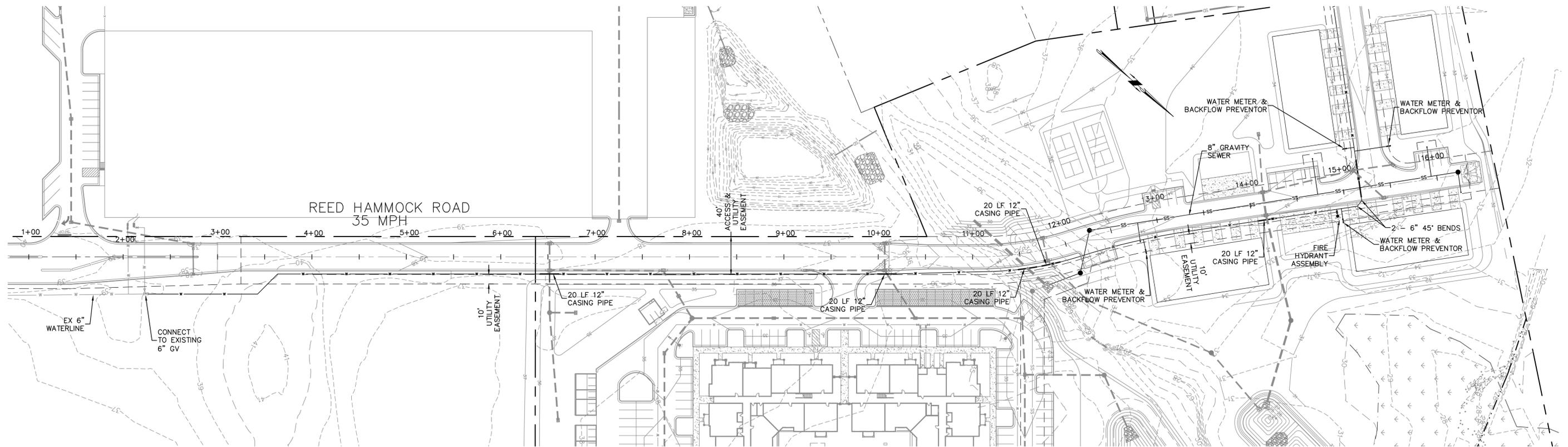
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WATER & SEWER PLAN/PROFILE

Sheet No.
C-7.1



PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

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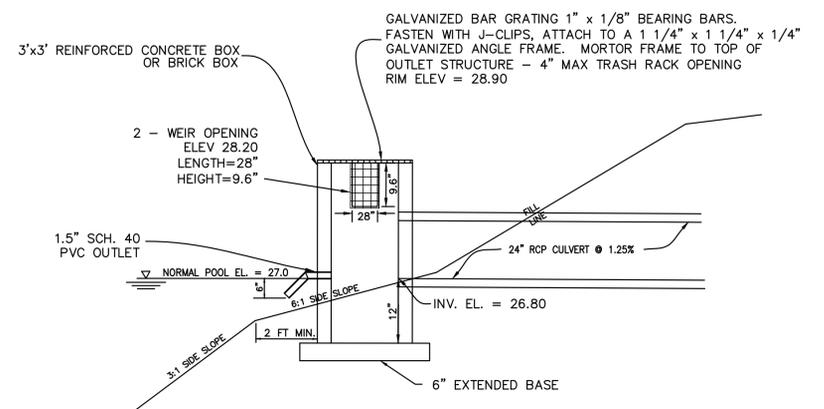
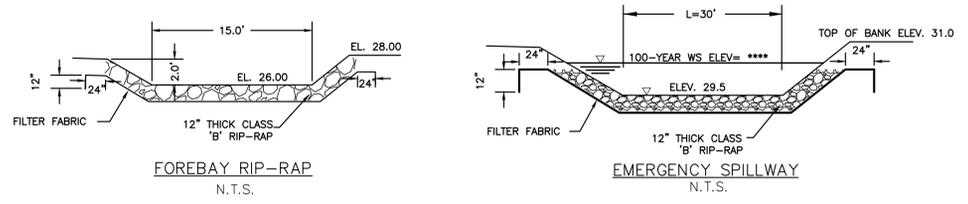
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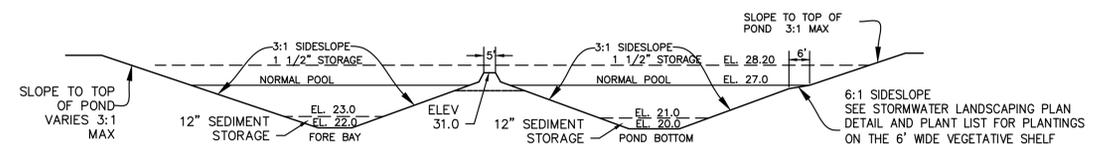
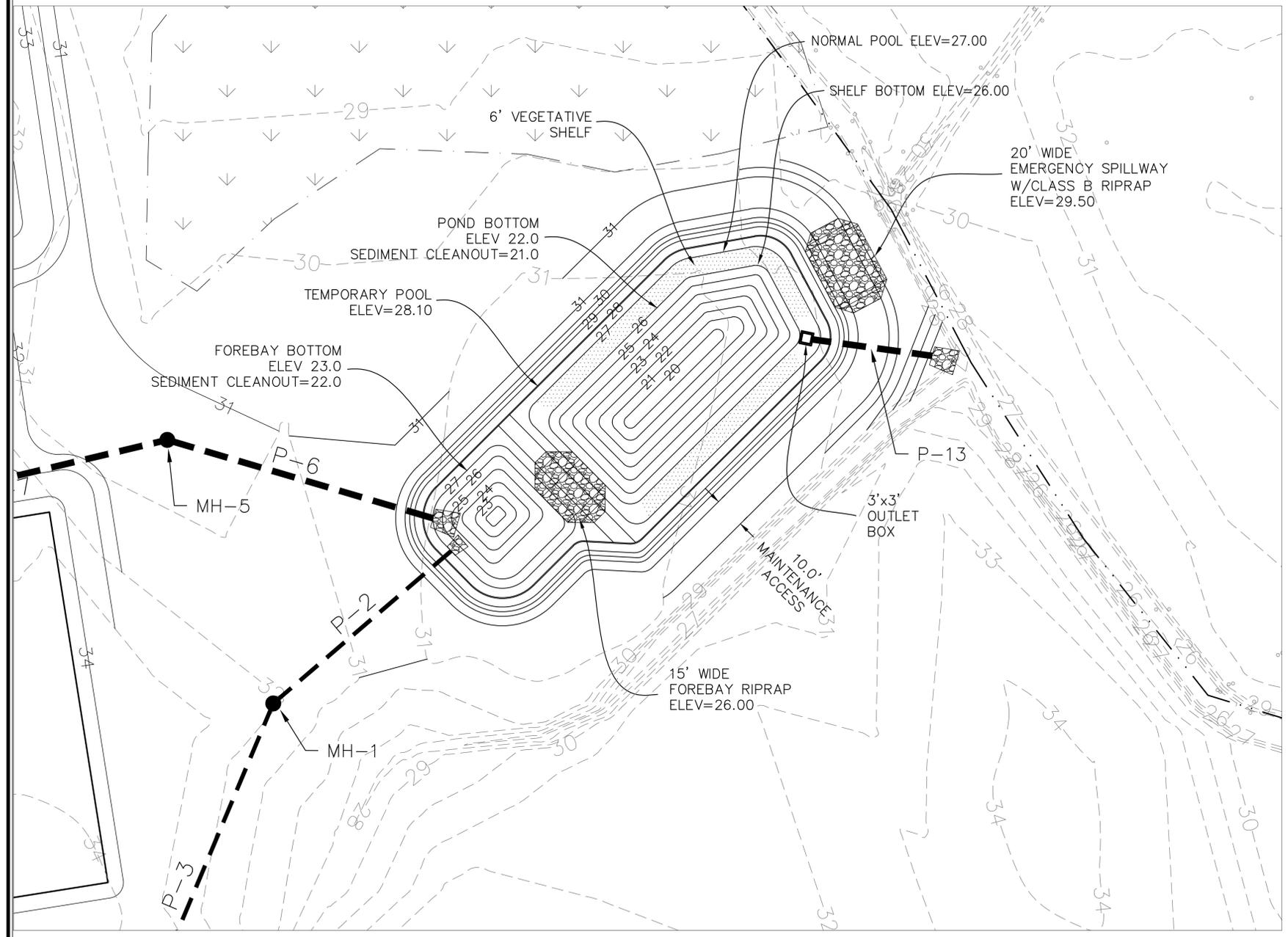
WATER PLAN/PROFILE

Sheet No. **C-7.2**



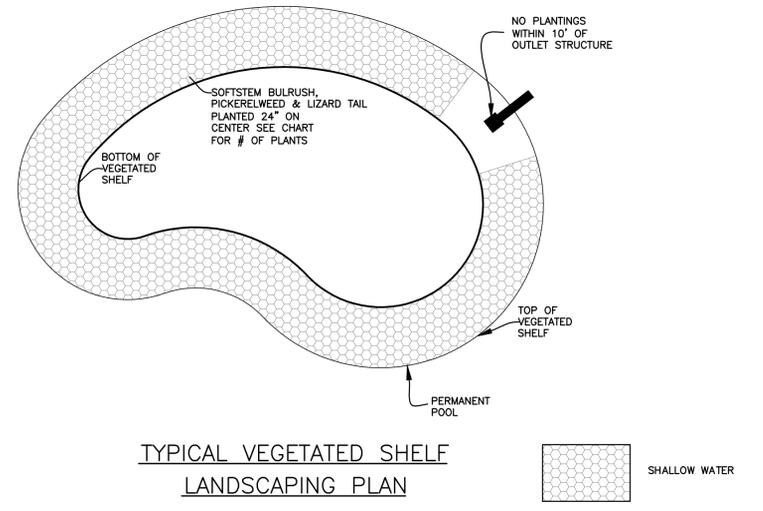
NOTES:
 1. DO NOT PLANT TREES WITHIN 10 FEET OF THE INLET OR OUTLET PIPES, SPILLWAYS OR FLOW SPREADERS. TREE SPECIES WITH WATER-SEEKING ROOTS SUCH AS WEeping WILLOWS AND POPLARS, SHOULD BE AVOIDED WITHIN 50 FEET OF PIPES OR MANMADE STRUCTURES. EVERGREEN TREES WHICH PRODUCE RELATIVELY LITTLE LEAF-FALL ARE PREFERRED IN AREAS DRAINING TO DETENTION DEVICES. TREES SHOULD BE SET BACK SO THAT BRANCHES DO NOT EXTEND OVER THE PERMANENT POOL.

NOTES:
 1. DESIGN ELEVATIONS FOR WET DETENTION BASIN ARE TO AN ELEVATION OF 22.0 IN THE MAIN POND AND 26.0 IN THE FOREBAYS WITH SEDIMENT STORAGE DOWN TO 21.0 IN THE MAIN POND AND 25.0 IN THE FOREBAYS.
 2. ALL IMPERVIOUS SITE AREA TO BE DRAIN TO PROPOSED STORM SEWER SYSTEM AND DISCHARGED TO THE WET DETENTION POND.
 3. POND WILL BE PUMPED DOWN BY MECHANICAL MEANS IN CASE OF EMERGENCY.
 4. PRIOR TO USE AS A WET DETENTION BASIN, SEDIMENT BASIN WILL BE MUCKED OUT.
 5. POND SIDE SLOPES TO BE SODDED WITH CENTIPEDE GRASS OR EQUIVALENT.
 6. ALL SLOPES ABOVE PERMANENT POOL TO BE 3:1 MAX.



NORMAL POOL ELEVATION	SHELF BOTTOM ELEVATION	POND DEPTH (FT)	VOLUME SHELF (CF)	POND BOTTOM SHELF AREA (SF)	SURFACE AREA PROVIDED (SF)	SURFACE AREA REQUIRED (SF)	PERIMETER PERMANENT POOL (LF)	AVERAGE POND DEPTH (FT)
27.0	26.0	6.0	801	3,183	4,564	3,793	267	3.5

POND CROSS-SECTION
N.T.S.

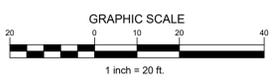


TYPICAL VEGETATED SHELF
LANDSCAPING PLAN

VEGETATIVE SHELF = 1,093 S.F.
 @ 1 PLANT PER 4 SF (24" O.C.) = 273 PLANTS

PLANT TYPE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	CALIPER	HEIGHT	NOTES
HERBACEOUS	91	Schoenoplectus tabernaemontani	Softstem Bulrush	CONT.	4" Pot		24" O.C.
	91	Pontederia cordata	Pickereelweed	CONT.	4" Pot		24" O.C.
	91	Saururus cernuus	Lizard Tail	CONT.	4" Pot		24" O.C.

NOTES:
 1. NO PLANTINGS WITHIN 10' OF OUTLET STRUCTURE.
 2. BECAUSE MOST STORMWATER BASINS ARE EXCAVATED TO DEEP SUB-SOILS, THEY OFTEN LACK THE NUTRIENTS AND ORGANIC MATTER NEEDED TO SUPPORT VIGOROUS GROWTH OF PLANTS. ALL LANDSCAPE MATERIAL, INCLUDING GRASS, SHOULD BE PLANTED IN GOOD TOPSOIL. NATIVE UNDERLYING SOILS MAY BE SUITABLE FOR PLANTING IF AMENDED WITH 4 INCHES OF WELL-AGED COMPOST TILLED INTO THE SUBGRADE. COMPOST SHOULD MEET SPECIFICATIONS FOR GRADE A COMPOST QUALITY.
 3. A MINIMUM TWO-YEAR WARRANTY PERIOD STIPULATING REQUIREMENTS FOR PLANT SURVIVAL/REPLACEMENT.



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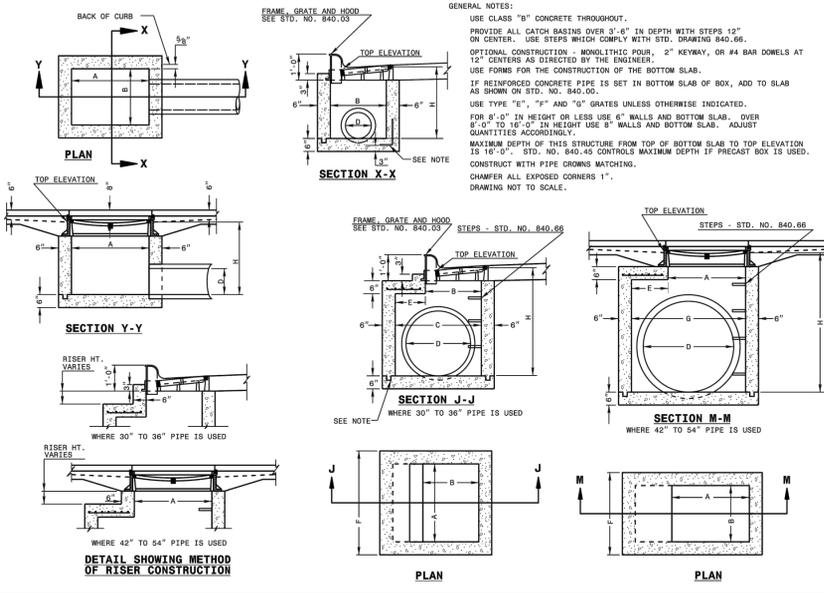
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POND DETAIL

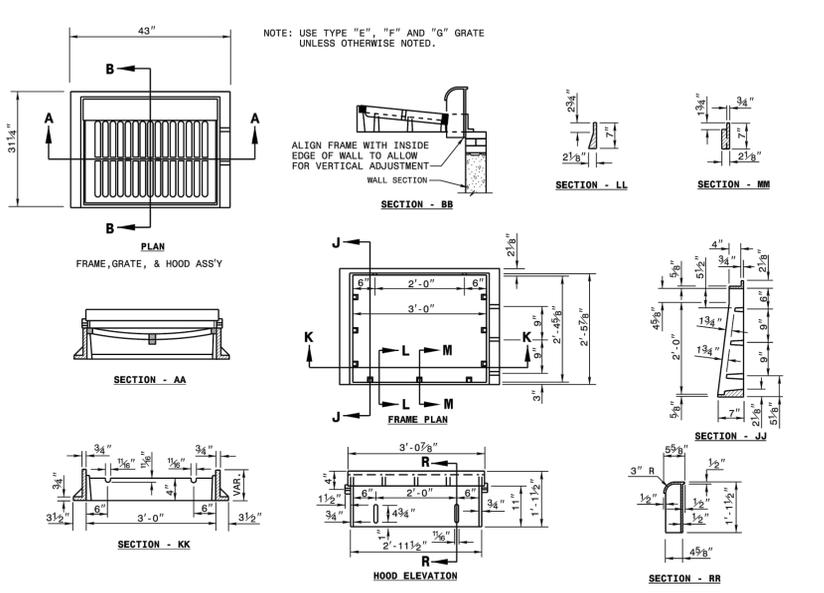
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C-8.0



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
CONCRETE CATCH BASIN
 12" THRU 54" PIPE

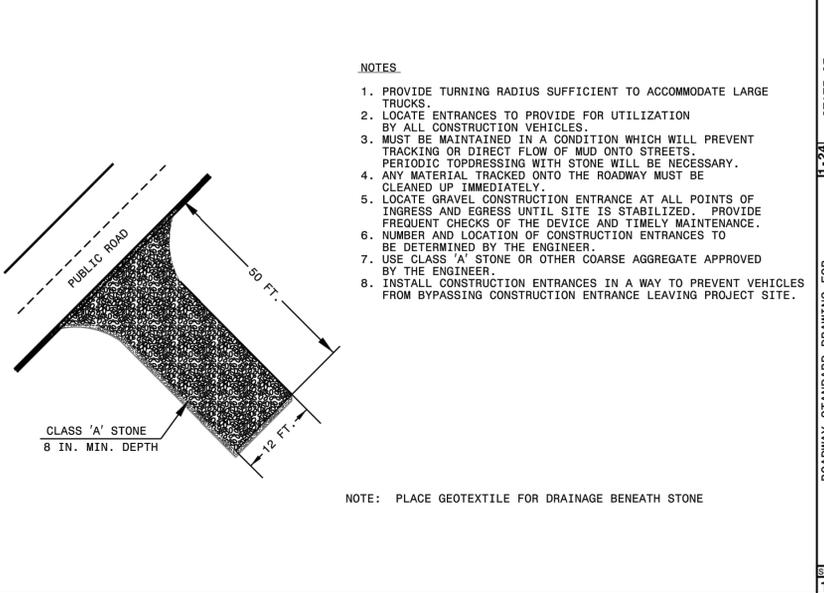
SHEET 1 OF 2
840.02



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
 FOR USE ON STANDARD CATCH BASIN

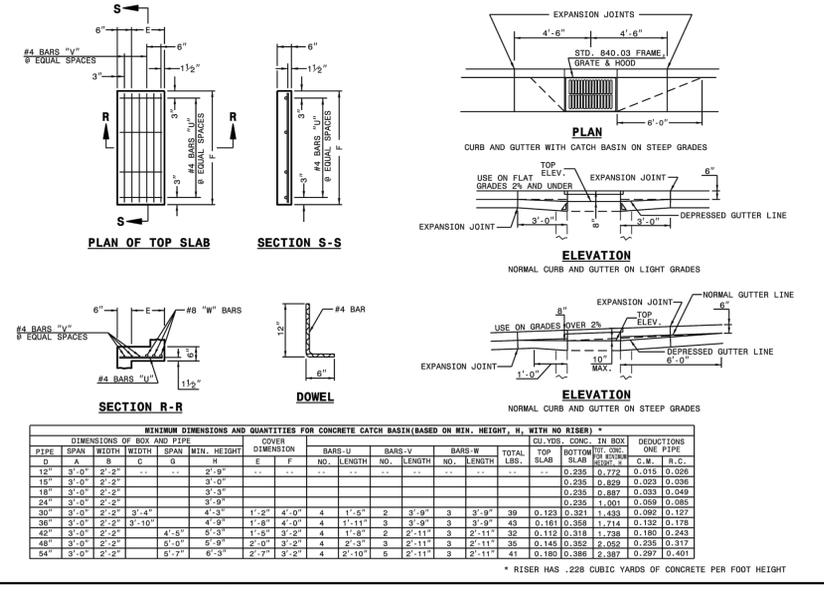
SHEET 1 OF 2
840.03



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
GRAVEL CONSTRUCTION ENTRANCE

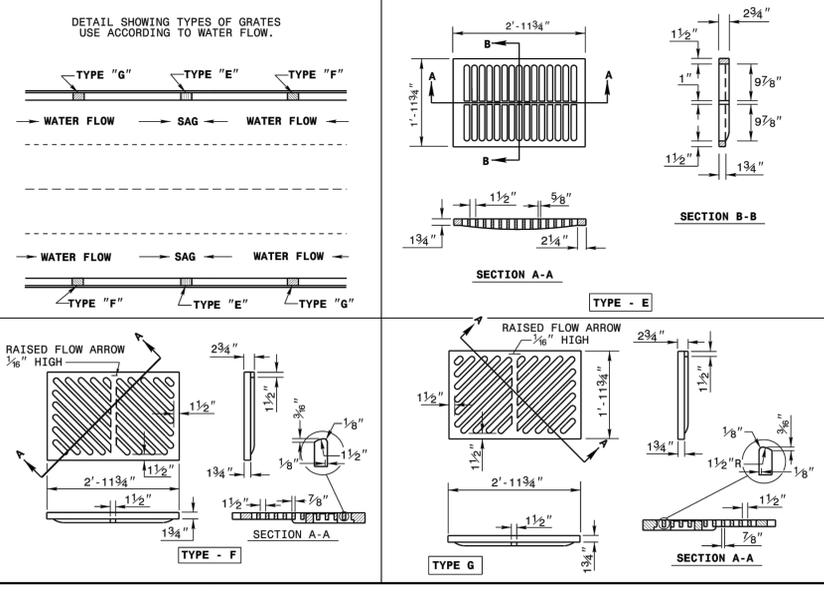
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STATE OF NORTH CAROLINA
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ROADWAY STANDARD DRAWING FOR
CONCRETE CATCH BASIN
 12" THRU 54" PIPE

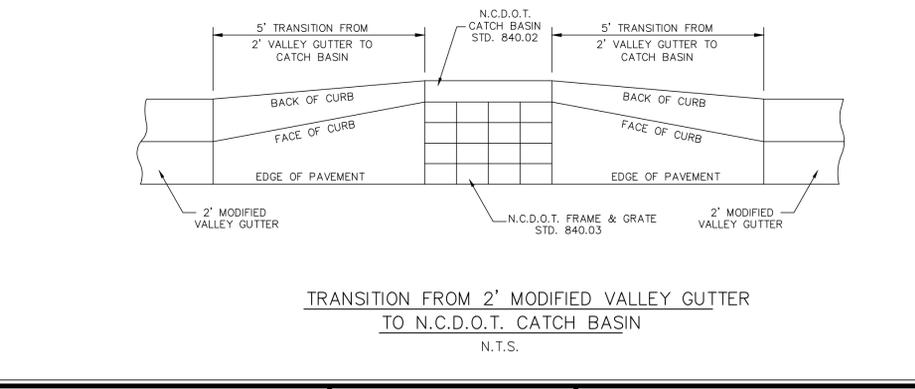
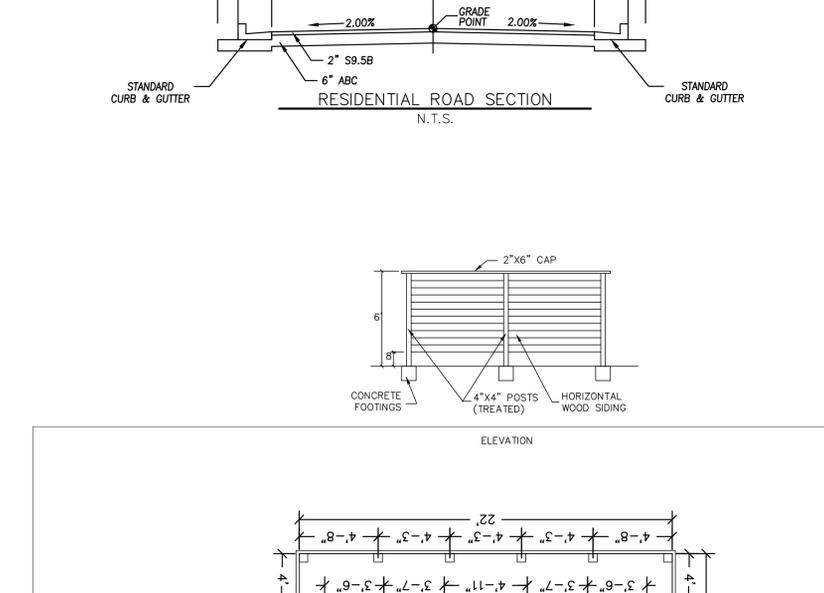
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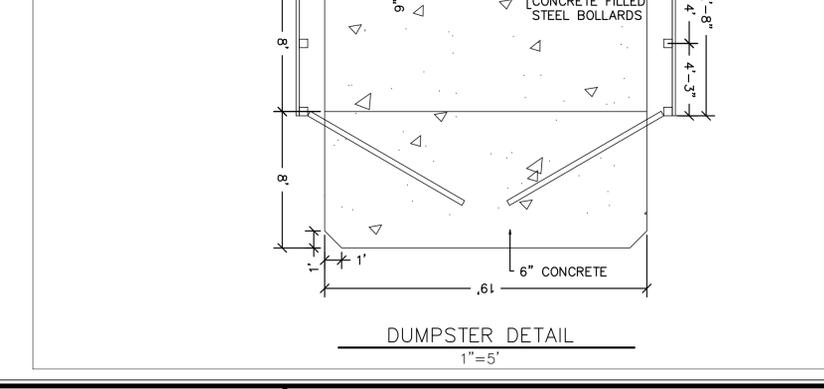
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 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
 FOR USE ON STANDARD CATCH BASIN

SHEET 2 OF 2
840.03



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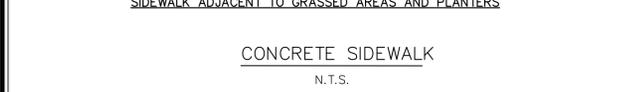
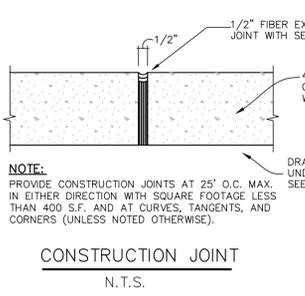
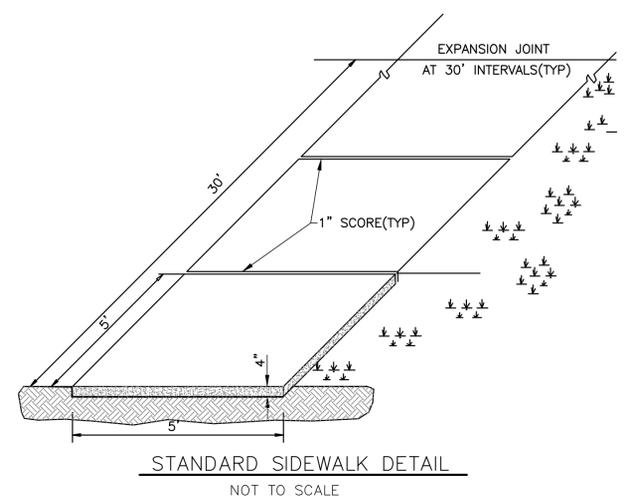
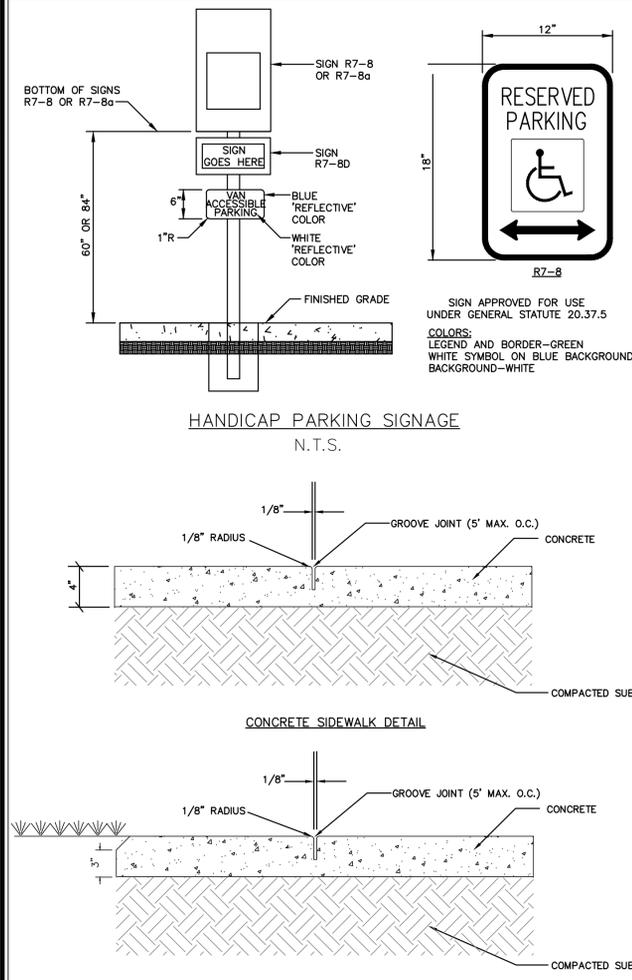
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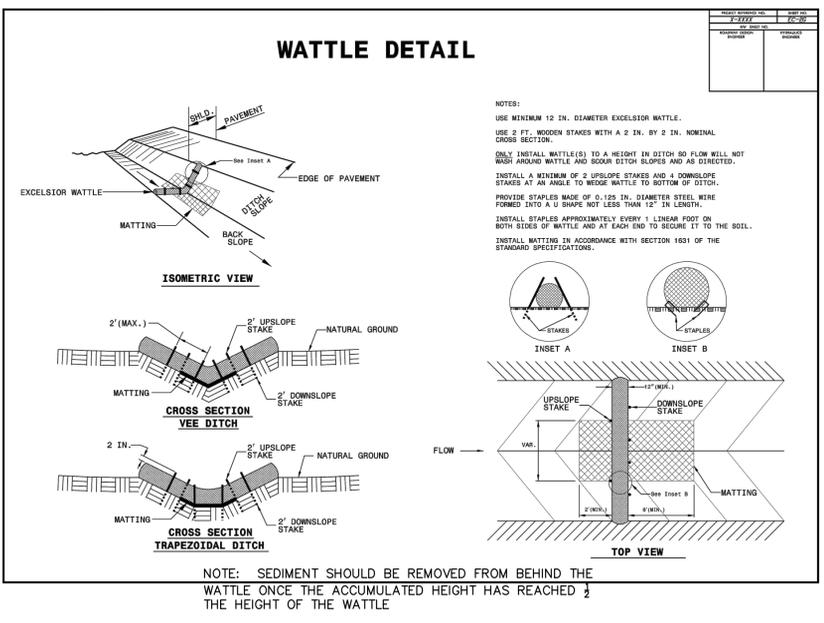
MISCELLANEOUS DETAILS

Sheet No.
C-8.2



GENERAL NOTES:
 A GROOVE JOINT 1" DEEP WITH 1/8" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK ADJUTS ANY CURB & GUTTER AND ANY RIGID STRUCTURES.
 IN SIDEWALKS & PLAZA AREAS EXPANSION JOINTS ARE REQUIRED AT NO GREATER THAN 30' INTERVALS.
 CONCRETE SHALL BE 3600 PSI. IN 28 DAYS.

PRELIMINARY - DO NOT USE FOR CONSTRUCTION



GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being detailed compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Site Area Description	Required Ground Stabilization Timeframes	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1	14	- 7 days for slopes greater than 50' in length and with slopes steeper than 4:1 - 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones - 10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	- 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones - 10 days for Falls Lake Watershed unless there is zero slope

NOTE: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers	• Permanent grass seed covered with straw or other mulches and tackifiers
• Hydroseeding	• Geotextile fabrics such as permanent soil reinforcement matting
• Rolled erosion control products with or without temporary grass seed	• Hydroseeding
• Appropriately applied straw or other mulch	• Shrubs or other permanent plantings covered with mulch
• Plastic sheeting	• Uniform and evenly distributed ground cover sufficient to resist erosion
	• Structural methods such as concrete, asphalt or retaining walls
	• Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface water. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into lakes, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials on-site.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Impact	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unobserved days (are the wet/dry days as a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&S Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measure. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits. 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Storms or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(d) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&S measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection rests the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&S Plan Documentation

The approved E&S plan as well as any approved deviation shall be kept on the site. The approved E&S plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&S plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&S measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&S plan.	Initial and date each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures or if the E&S measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&S plan.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&S measures	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&S measures.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on the Site

In addition to the E&S plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all of the required elements. Use of electronically available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the NCG01 self-inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is not feasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these terms.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

No.	Revision	Date	By

Designer	MNH	Scale	AS SHOWN
Drawn By	MNH	Date	MAY, 2022
Checked By	MNH	Job No.	

OAK GROVE @ BLAKE FARM TOWNHOMES
 PENDER COUNTY NORTH CAROLINA

TRASK LAND COMPANY, INC.
 1022 ASHES DRIVE, SUITE 201
 WILMINGTON, NC 28405

PORT CITY CONSULTING ENGINEERS, PLLC
 6216 STONEBRIDGE ROAD
 WILMINGTON, NC 28409
 910-599-1744 LICENSE No. P-1032

MISCELLANEOUS DETAILS

Sheet No. **C-8.3**